# DRAFT Public Outreach Document for What's an SSMP?

This easy to read document is developed and provided to interested parties to assist in educating cities, agencies, their management, elected officials and the private sector on the concepts of Sewer System Management Plans.

It is based on examples taken from typical "cMOM" (Capacity, Management, Operations and Maintenance) Program language in use now with many agencies nationally and that has also appeared in Consent Orders, Enforcement Actions, Waste Discharge Requirements and EPA's previously proposed Draft SSO Rule.

In my discussions with numerous cities and agencies, it focuses on what should be in a good plan and allows for site specific flexibility depending on the issues and challenges you face in reliably collecting and delivering the sewage to the local treatment plant.

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#### **TABLE OF CONTENTS**

Sewer System Management Plan (SSMP)	Page No.
Requirements	2
(i) Goals	2
(ii) Organization	2
(iii) Legal Authority	3
(iv) Measures and Activities	3
) Design and Performance Provisions	4
(vi) Monitoring, Measurement and Program Modifications	4
(vii) Overflow Emergency Response Plan	4
(viii) Fats, Oils, and Grease (FOG) Control Program	5
(ix) System Evaluation and Capacity Assurance Plan	6
(x) SSMP Program Audits	6
(xi) Communications	6
Sewer System Management Plan Development Time Schedule	6

### Requirements fro the owner (discharger):

- The discharger shall properly fund, manage, operate and maintain, with adequately trained staff and/or contractors possessing adequate knowledge skills and abilities as demonstrated through a validated certification program at all times (CWEA's <a href="www.cwea.org">www.cwea.org</a> is recommended in CA), all parts of the sewage collection system owned and/or operated by the discharger.
- 2. The discharger shall provide adequate capacity to convey base flows and peak flows, including wet weather related events to the minimum design criteria as defined in the discharger's System Evaluation and Capacity Assurance Plan, for all parts of the collection system owned or operated by the discharger.
- 3. The discharger shall take all feasible steps to stop and mitigate the impact of Sewer System Overflows (SSOs) in the collection system owned or operated by the discharger.
- 4. The discharger shall provide notification to the local County Health Care Agency (HCA) and the local Regional Board so that they can notify parties with a reasonable potential for exposure to pollutants associated with an SSO.
- 5. The discharger shall develop and implement a written plan called a Sewer System Management Plan (SSMP), for compliance with these requirements and make it available to any member of the public upon request in writing.
- 6. The essential elements of the SSMP are specified below. If the discharger believes that any element of this section is not appropriate or applicable for their SSMP program, the program does not need to address it, but the SSMP must explain why that element is not applicable. The Regional Board will consider the quality of the SSMP, its implementation and effectiveness in any relevant enforcement action, including, but not limited to, any enforcement action for violation of the Clean Water Act, California Water Code, the Basin Plan prohibition, or these requirements. The SSMP shall include the following components, with the exception of non-applicable components, as stated above:

# Sewer System Management Plan (SSMP)

- (i) **Goals**: The main goals of the SSMP are to prevent SSOs and to provide a plan and schedule for measures to be implemented to prevent SSOs.
- (ii) **Organization**: The SSMP must identify:
- (A) Administrative and maintenance positions responsible for implementing measures in the SSMP program, including lines of authority by organization chart or similar document; and
- (B) The chain of communication for reporting SSOs, from receipt of a complaint or other information, including the person responsible for reporting SSOs to the Regional Water Quality Control Board, the local County Health Care Agency, and State Office of Emergency Services (OES); reporting to the OES is required if the discharge is 1,000 gallons or larger.

- (iii) **Legal Authority:** The SSMP shall include legal authority, through sewer use ordinances, service agreements or other legally binding procedures, to:
- (A) Control infiltration and connections from inflow sources, including satellite systems and their connections from private systems;
- (B) Require that sewers and connections be properly designed and constructed;
- (C) Ensure proper installation, testing, and inspection of new and rehabilitated sewers (such as new or rehabilitated collector sewers and new or rehabilitated service laterals);
- (D) Limit fats and greases and other debris that may cause blockages in the sewage collection system.
- (E) Implement the general and specific prohibitions of the national pretreatment program under 40 CFR 403.5.
- (iv) **Measures and Activities**. In order to provide an adequate and appropriate SSO reduction plan, the SSMP shall address the elements listed below that are appropriate and applicable to the discharger's system, and identify the person or position in the organization responsible for each element:
- (A) Provide adequate operation and maintenance of facilities and equipment;
- (B) Maintain an up-to-date map of the collection system showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and stormwater conveyance facilities;
- (C) Maintain relevant information to establish and prioritize appropriate SSMP activities (such as the immediate elimination of dry weather overflows or overflows into sensitive waters, such as public drinking water supplies and their source waters, swimming beaches and waters where swimming occurs, shellfish beds, designated Outstanding National Resource Waters or Areas of Special Biological Significance, National Marine Sanctuaries, waters within Federal, State, or local parks, and water containing threatened or endangered species or their habitat), and identify and illustrate trends in overflows, such as frequency and volume;
- (D) Routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the gravity and pressure collection system sewers, with more frequent cleaning and maintenance targeted at known problem areas including pumping facility components. The Preventative Maintenance (PM) program should have a system of tracking work orders and assessing the success of the PM program;
- (E) Establish a program to assess the current capacity of the collection system owned by the discharger or where the discharger has operational control; including diversions of urban runoff to the sewer system during dry weather periods and control of infiltration and inflow (I/I) during both wet weather events and dry weather periods;
- (F) Identify and prioritize structural deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. This shall include a rehabilitation plan including schedules for the entire system. As with the PM program, sewer rehabilitation and replacement is crucial for the prevention of SSOs. Among the provisions that shall be specified in this section is a plan to rehabilitate and replace sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects as well as pumping facility components that are prone to failure. The program shall also include

regular visual and TV inspection of sewer pipes, manholes and a system for assessing and ranking the condition of sewer pipes and manholes. Finally, the rehabilitation and replacement plan shall include a financial plan that properly manages and protects the infrastructure assets:

- (G) Provide training on a regular basis for staff in collection system operations, maintenance, and monitoring and determine if operations and maintenance contractors' staffs are appropriately trained;
- (H) Provide equipment and replacement parts inventories, including identification of critical replacement parts such as but not limited to pumping facility components;
- (I) Establish a site-specific implementation plan and schedule for a public education outreach program that promotes proper disposal of grease and fats for all service connections;
- (J) In accordance with the local County's Drainage Area Management Plan, establish a plan for responding to SSOs from private property that discharge to public right of ways and storm drains, to prevent discharges from SSOs to surface waters and storm drains; and
- (K) Develop a plan and a schedule for providing an analysis of alternative methods of disposal for grease and fats, and an implementation plan and a schedule for providing adequate disposal capacity for grease and fats generated within the sewer system service area. This plan shall include an evaluation of the feasibility of using sludge digesters at NPDES wastewater treatment plants for grease disposal and treatment, recycling, rendering, and other disposal alternatives.

#### (v) Design and Performance Provisions:

- (A) Develop design and construction standards and specifications for the installation of new sewer systems, pump stations and other appurtenances; and for rehabilitation and repair of existing sewer systems; and
- (B) Develop procedures and standards for inspecting and testing the installation of new gravity and pressure sewers, pumping facilities and other appurtenances, and for rehabilitation and repair projects.

# (vi) Monitoring, Measurement and Program Modifications

- (A) Monitor the implementation and where appropriate annually measure the effectiveness of each element of the SSMP;
- (B) Update program elements, but no less than annually based on your monitoring or performance evaluations; and
- (C) Modify the SSMP program, as appropriate to keep it updated and accurate, and ensure that it is available for audit at all times and staff and/or contractors are adequately informed of program changes.
- (vii) **Overflow Emergency Response Plan (SSOERP)** The discharger shall develop and implement a sanitary sewer overflow emergency response plan that identifies measures to protect public health and the environment. At a minimum, this plan shall include the following:

- (A) Ensure proper notification procedures so that the primary responders are informed of all SSOs in a timely manner (to the greatest extent possible):
- (B) Ensure that all SSOs (including those that do not discharge to waters of the State) are appropriately responded to, including ensuring that reports of SSOs are immediately dispatched to appropriate personnel for investigation and appropriate response;
- (C) Ensure immediate notification of health agencies and other impacted entities (e.g., water suppliers) of all SSOs. Report all SSOs to the Regional Water Quality Control Board and the local County Health Care Agency, and report to the State OES, if the SSO is 1,000 gallons or larger. The SSMP shall identify the public health agency and other officials who will receive immediate notification;
- (D) Ensure that appropriate staff and contractor personnel performing O&M or capital project work are aware of and follow the SSOERP and are appropriately trained;
- (E) Provide emergency operations, such as traffic and crowd control and other necessary emergency response;
- (F) Take all reasonable steps to contain sewage and prevent sewage discharges to surface waters and minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge;
- (G) Develop and implement a plan for the use of portable aerators where complete recovery of the sanitary sewer overflows is not practicable and where severe oxygen depletion in existing surface waters is expected; and
- (H) Develop and implement a plan to respond in a timely manner to SSOs and other emergencies. Collection system staff or contractors should be able to respond to an SSO and attempt to contain in less than an hour from the first call. The discharger shall be capable of meeting this response time day or night, every day of the week. The discharger must own or have ready access to spill and emergency response equipment such as vacuum trucks, hydroflushers or combination sewer cleaning trucks, pumps, temporary bypass hoses or piping, and portable generators.
- (viii) Fats, Oils, and Grease (FOG) Control Program: Prepare and implement a fats, oils and grease source control program to reduce the amount of these substances discharged to the sewer collection system. This plan shall include the legal authority to prohibit discharges to the system and identify measures to prevent SSOs caused by fats, oils, and grease blockages of sewers. The elements of an effective FOG control program may include requirements to install grease removal devices (such as traps or preferably, interceptors), design standards for the removal devices, maintenance requirements, Best Management Practices (BMP) requirements, record keeping and reporting requirements. An effective FOG control program must also include authority to inspect grease-producing facilities, enforcement authority, and sufficient staff or contractors to inspect and enforce the FOG ordinance. Grease disposal alternatives should be explored with the local wastewater treatment plant operator and/or private sector to ensure that when FOG is removed from the point sources that a safe and reliable system is in place to accommodate and properly handle the FOG.
- (A) The FOG control program shall identify trouble spot sections of the sewer system subject to FOG blockages and establish a PM cleaning schedule for each section; and
- (B) The program shall develop and implement source control measures, for all sources of grease and fats discharged to the sewer system, for each section identified in (A) above.

- (ix) **System Evaluation and Capacity Assurance Plan**: Prepare and implement a capital improvement plan that will provide hydraulic capacity of key sewer system elements under peak flow conditions. At a minimum, the plan must include:
- (A) Evaluation: Steps to evaluate those portions of the collection system which are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from SSOs that escape from the system) associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity) and the major sources that contribute to the peak flows associated with overflow events;
- (B) Capacity Enhancement Measures: Establish an annual and long-term capital improvement program to address identified hydraulic deficiencies including prioritization, alternatives analysis, and schedules; and
- (C) Plan updates: The plan must be updated, at a minimum annually, to describe any significant change in proposed actions and/or implementation schedules. The updates should include available information on the performance of measures that have been implemented.
- (x) **SSMP Program Audits**: As part of the SSMP and not less than annually, the discharger shall conduct an internal audit, appropriate to the size of the system and the number of overflows, and submit to its Regional Board a report of such audit, evaluating the SSMP and its compliance with this subsection, including its deficiencies and steps to correct them.
- (xi) **Communications:** The discharger shall communicate on a regular basis with the public and interested parties on the implementation and performance of its SSMP. The communication system shall allow the public and interested parties to provide input to the discharger as the program is developed and implemented.

### **Sewer System Management Plan Development Time Schedule**

7. The discharger shall develop, deliver, and implement its site specific SSMP in accordance with the SWRCB's proposed schedule. (dates for deliverables to be negotiated with SWRCB or designee?)

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